


OB Nurse at Local Hospital Diagnosed With Active Tuberculosis



Case Study
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The Importance of Tuberculosis Testing for Healthcare Workers

- Detect early conversion
- Detect possible TB case
- Prevent possible exposure

Index Case History

- 40 year old white female
- U. S. born
- Cough, fatigue, fever and night sweats
- No Hx of smoking, drugs, or alcohol abuse
- No Hx of HIV

Index Case Risk Factors

- Healthcare worker
- Recent international travel
- Recent adoption of a foreign-born child with LTBI
- Annual employment TB screening not conducted

Reasons for Delayed Diagnosis

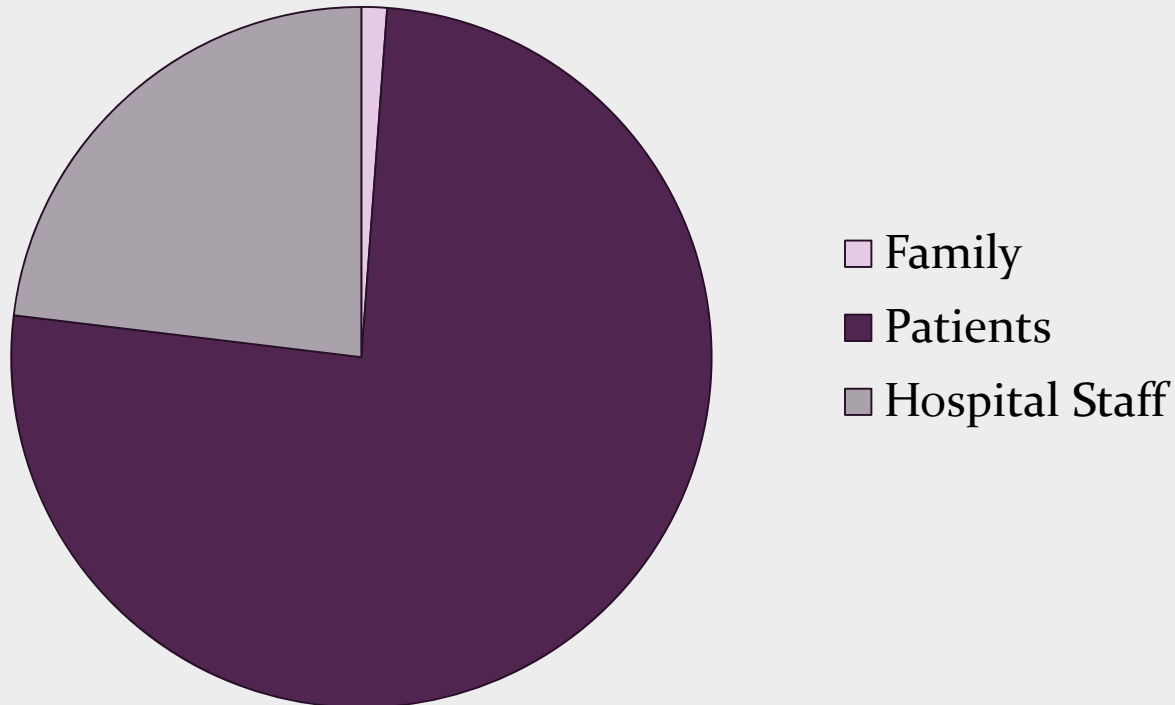
- Misdiagnosed in ER (pneumonia) April 2007
- Prescribed Levaquin/masked symptoms
- Delayed TB testing
- CXRs June, July and October 2007 “unresolving pneumonia”
- CXR and CT Scan November 2007 read as normal
 - State TB employed physician later found RLL infiltrate

Delayed Treatment

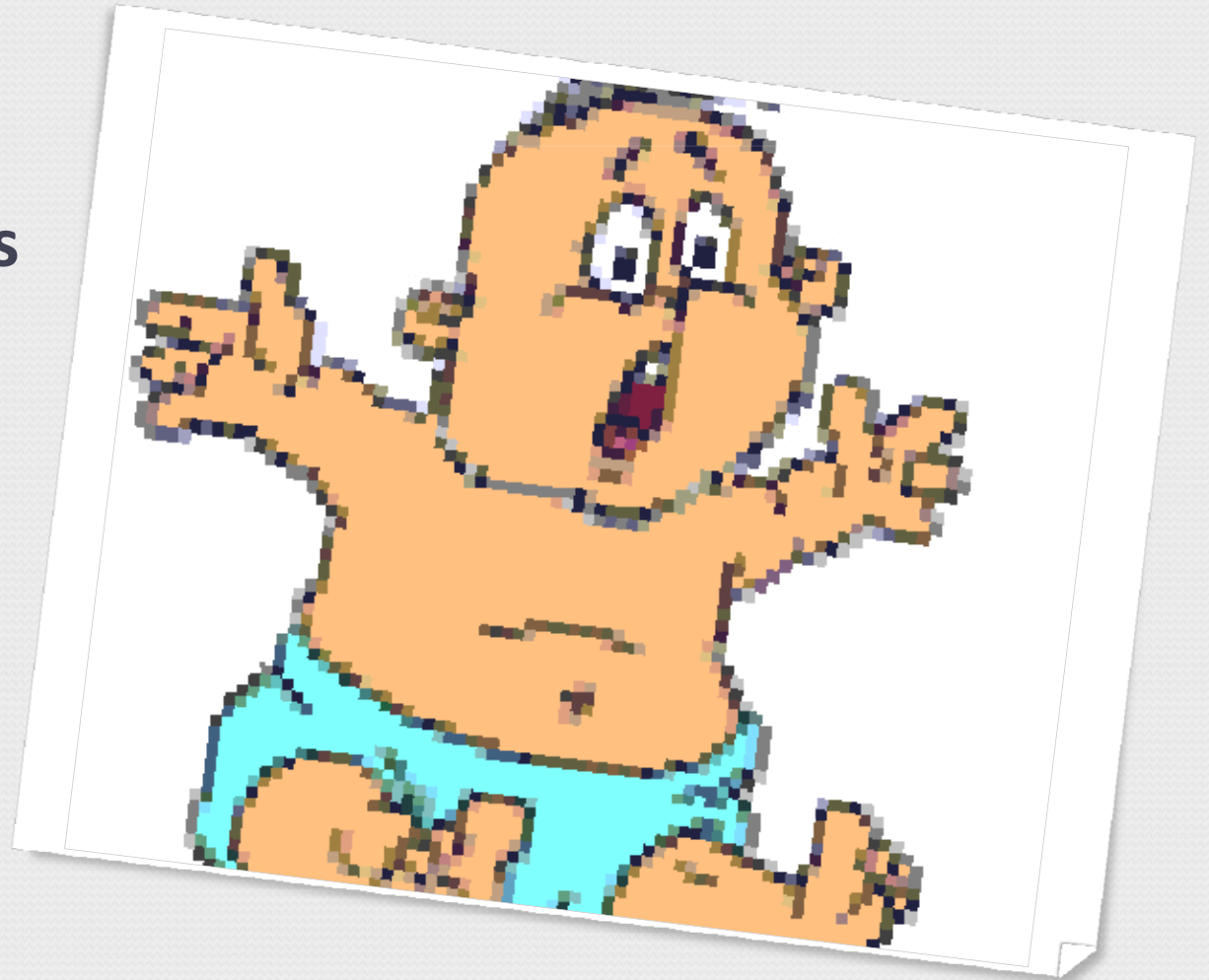
- TST was obtained 10-24-07 - 17mm positive result
- Bronch performed 11-14-07
- Prescribed 4 drug therapy
- AFB smear negative
 - discontinued 4 drug therapy after 7 days
 - cleared patient to return to work
- Culture positive December 2, 2007
 - Reported to Health Department at this point

Contact Investigation

611 Total Contacts Tested



TST on 146 infants



Contact Investigations Findings

- 2 Positive tests
 - 1 baby/completed treatment
 - 1 adult/did not complete treatment
 - To neighboring county for treatment
 - Intolerant of meds due to breast cancer treatment

Importance of Contact Investigation

- Prevent potential future case of TB
- Prevent potential case of TB Meningitis in Infants
- Identify LTBI cases
- Identify any further active cases

Hospital Cooperation

- Provided CXRs for the infants
- Provided LFTs for the infants
- Provided computer/monitor for CXR (disc) readings at the LHD
- Mailed notification letters to TB contacts
- Joint press release with LHD case at the hospital

Outcome

- Developed Partnership between LHD and Hospital
- Education for hospital staff
- Hospital staff now recognizes warning signs of TB infection
- Physicians more likely to follow protocol to detect and prevent additional exposure
- Potential cases are now reported as soon as the diagnostic process begins

“Think TB”